Bruhat Bangalore Mahanagara Palike

EAST Zone
Hebbal DIVISION

Estimate

Name of the Work: Providing WATER SUPPLY AT GOVINDAPPA LAYOUT in Ward no-18

Estimate Cost Rs.5.00 Lakhs

Hebbal Sub-Division

BRUHATH BANGALORE MAHANAGARA PALIKE

Name of Work:-PROVIDING WATER SUPPLY AT GOVINDAPPA LAYOUT, IN WARD NO.18

Est Cost:-5.00Lakhs

SL NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
01	Carrying out geophysical survey Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump. MWS or PWSS by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation. Geophysical investigation of existing Ground Water in the vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth 1.0 mtrs in consolidated formation for aquifer proposed to be tapped probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and labour required etc. (PRHSR P-43-I-9 4)	No	1	1900.00	1900.00
02	Sinking of borewell of 165mm clear using super fast hydraulic rig of capacity 250 PSIG & above 900 MCF & above in all strata including over burden upto 22m, fixing of casing pipes, collars and cap with necessary cutting and threading including transportation of rig and supporting vehicles, screw charges and cost of consumables, etc., complete including yield testing at the final depth with a minimum working of compressor for one hour, all as specified. (PRHSR P-41 I-9.1 1 to 9.1.6)				
	Upto 50mtrs depth	Mtrs	50	287.00	14350.00
	Above 50mtrs upto 100mtrs.	Mtrs	50	379.00	18950.00
	Above 100 mtrs upto 150 mtrs.	Mtrs	50	422.00	21100.00
	Abov 150 mtrs upto 200 mtrs.	Mtrs	50	464.00	23200.00
	Above 200mts upto 250mts	Mts	50	513.00	25650.00
	Above 250mts upto 300mts	Mts	50	550.00	27500.00
03	Providing of ISI mark 175mm nominal bore medium black ERW casing pipe of 5mm thick black electric continuous welded mild steel tube material confirming to IS 1387/1993 & manufactured from hot rolled steel skelp/stripes in random length of4 to 7 mtrs both ends threaded confirming to IS 554/1985, one and fixing with a socket and the other end with a plastic protection and (inclusive of all taxes) (P no II SI no 54)	Mtrs	24	1325	31800.00

SL. NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
04	Providing 175mm dia MS collar (P no II Sl no 55)	Nos	6	150.00	900.00
05	Providing 175mm dia. bore cap (P no II Sl no 54)	Nos	1	100.00	100.00
06	Supply and deliveryt of submersible pump sets suitable for borewell of 165mm dia with specified duty conditions as detailed below and satisfied in BIS with ISI mark with a mininmum efficiency of 42% pump shall Confirm to IS 8034/2002 and motor confotrming to IS 9283/1995 with ISI certification with latest amendments for the following				
a	06 HP 10 satge submersible pumpset	NOs		1 no. of submersible pump is considered for estimation on an average 47,200/-	
b	06 HP 12 satge submersible pumpset	NOs			
C	06 HP 15 satge submersible pumpset	NOs			
D	06 HP 18 satge submersible pumpset	NOs			
E	7.5 HP 10 satge submersible pumpset	NOs			
F	7.5 HP 12 satge submersible pumpset	NOs			
G	7.5 HP 16 satge submersible pumpset	NOs			
H	7.5 HP 18 satge submersible pumpset	NOs			
I	7.5 HP 20 satge submersible pumpset	NOs			
J	7.5 HP 22 satge submersible pumpset	NOs			
K	7.5 HP 23 satge submersible pumpset	NOs			
L	10 HP 10 satge submersible pumpset	NOs			
M	10 HP 13 satge submersible pumpset	NOs			47,200.00
N	10 HP 15 satge submersible pumpset	NOs			
O	10 HP 16 satge submersible pumpset	NOs			
P	10 HP 20 satge submersible pumpset	NOs			
Q	10 HP 25 satge submersible pumpset	NOs			
R	10 HP 30 satge submersible pumpset	NOs			
S	12.5 HP 16 satge submersible pumpset	NOs			
1	12.5 HP 18 satge submersible pumpset	NOs			
U	12.5 HP 20 satge submersible pumpset	NOs			
V	12.5 HP 24 satge submersible pumpset	NOs			
W	12.5 HP 25 satge submersible pumpset	NOs			
X	12.5 HP 28 satge submersible pumpset	NOs			
Y	12.5 HP 30 satge submersible pumpset	NOs			
Z	15 HP 15 satge submersible pumpset	NOs			
Aa	15 HP 18 satge submersible pumpset	NOs			
Ab	15 HP 20 satge submersible pumpset	NOs			
Ac	15 HP 23 satge submersible pumpset	NOs			
Ad	15 HP 24 satge submersible pumpset	NOs			
Ae	15 HP 25 satge submersible pumpset	NOs			
Af	15 HP 26 satge submersible pumpset	NOs			
Ag	15 HP 30 satge submersible pumpset	NOs			
Ah	15 HP 35 satge submersible pumpset	NOs			
07	Providing & fixing in galvanized/ mild steel tubes (Heavy class as per IS 1239 part-1990) 65mm dia	Mts	100	468.52	46852.00

SL NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
	nominal bore with all fittings including cost of all materials labour charges HOM of equipment and testing and testing complete as per specification (PWD SR P No 94 I no-13.16)				
08	Supply heavy duty galvanized/ mild steel color suitable for 65mm dia normal bore galvinzed /mid steel	No	35	427.00	14,945.00
09	Supply of galvanized / mild steel union suitable for 65mm dia. nominal bore galvanized/ mild steel tube .(P.No XXXVII)	No	35	440.70	15,425.00
10	Supply of galvanized/mild steel elbow suitable for 65mm dia. nominal bore galvanized / mild tube .(P.No XXXVII)	No	35	187.10	6549.00
11	Supply of non return valve suitable for 50mm nominal bore galvanized / mild steel tube (P.no 99 I no.13.56)	No	1	1114.06	1114.06
12	Suppling of on load charges over swithches 4 poles, 415v 5hz Ac supply 100-125 amps Group A (BWSSB SR Rate P no-348 I No II group A)	No	1	9845.00	9845.00
13	Supplying and fully automatic star-delta unit push button type with suitable wires, 3 contractors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 440/440 volts 3 phase and wired after to the existing wooden board for motor. (BWSSB SR p no-335,I No-10(A)	No	1	5665.00	5665.00
14	Supply,fixing and wiring rotary selector swith suitable for voltameter(P-353, I-23)	No	1	264.00	264.00
15	Supplying shunt capacitors conforming to SI 2843, 3 phase 400/440 volts grade for power factor improvement of rotting machinery Capacitor in KVAR rating nos. (BWSSB SR P-345 I-15(c)	No	1	504.00	504.00
16	Erection of single phase preventor ammeters / including fixing selector switch / current operated earth leakage circuit breakers voltage operated earth leakage circuit breakers voltage operated circuit breaker / above 100A fuse channel set (3 Nos) HRC fuses above 100A (3 Nos) including wiring using suitable capacity wires, bolts, nuts, screws etc. including transportation charges from stores to spot. (P-28 I-16)	No	1	1500.00	1500.00
17	Fixing of shut capacitor..... KVAR capacity with necessary clamps, bolts and nuts to an existing wooden or metal board including banking of more than one capacitor. Upto 5KVAR. . (BWSSB SR P-345 I-15(a)	No	3	110.00	330.00
18	Fabricating, supplying and mounting 1200x900x350mm MS box made out of 18SWG suitable for floor/wall mounting, fully weather proof with double slanted top as per drawing with provision for better heat dissipation provided with hinged front cover with clear clamped to the door on EB meter side to facilitate meter reading, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable	No	1	7866.00	7866.00

SL NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
	entry pipe with gland and box should be finished with approved colour enameled metal paint etc., complete box of 36200 sqcm. @ Rs.0.20 18SWG. (BWSSB SR P-355 I-41)				
19	Supplying & fixing miniature circuit breakers/ isolators on existing MCB distribution boards using necessary fixing materials and wiring complete as required. 32 to 63amps triple pole. (BWSSB SR P-352 I-15)	No	1	2090.00	2090 00
20	Supplying, fixing of special type lamps on exicting board of halogen lamps (BWSSB SR P-357 I-21C)	No	1	143.00	143.00
21	Supplying & fixing angle iron frame work fabricated out of MS angle iron and MS flat with bolts, nuts, washers etc., and painted with 2 coats of red oxide and other two coats of approved paint. (a) Angle iron 40x40x6mm. BWSSB SR P-359 I-38)	No	1	231.00	231.00
22	Supplying and running of GI Copper strips or groundig connectios using necessary fixing materials requiredof 600x600x3mm GI plate(P-378 I-9(e)	No	1	1072.50	1073.00
23	Supplying & fixing angle iron frame work fabricated out of MS angle iron and MS flat with bolts, washers etc.75x75x6mm BWSSB SR P-355 I-38)	No	1	473.00	473.00
24	Supplying & drawing each PVC insulated 650/100V grade wire in the conduit (open or concealed systems of wiring) 7/0.036" (7/20) (Remarks. Copper Wire) BWSSB SR P-377 I-6)	No	1	198.00	198 00
25	Supplying and running GI/Copper conductor for grounding and (along with other wires of CTS or conduit system of wiring) using if necessary suitable size clamps bolts and nuts and washers etc..(P-38 I-10. (c) 8SWG GI Wire. BWSSB SR P-385 I-30.ia)	Mtr.	10	15.40	154.00
26	Supplying and fixing cast aluminium round or oblong type bulk head fitting with GI wire guard, glass cover with 60/100Watts 230v GLS lamp as required Group B (other approved make) BWSSB SR P-334 I-5C)	No	5	187.00	935.00
27	Supplying & drawing 3crore flat PVC shelthed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor conferming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and shelthed suitable for working voltage upto 1100V C. 4Sq.mm of 56 strands 0.3mm dia Group A BWSSB SR P-360 I-30.C.a)	Mtr	300	159.50	47850.00
28	Supplying & replacing one of the fuse cutouts having porcelain base of approved quality on the existing wooden block and wired complete. (P-44. I-38 (c) 63amps. BWSSB SR P-346 I-3c)	No	6	231.00	1386.00
29	Supplying & fixing of Danger / No Admission / No	No	1	45.00	45.00

S.C NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
	Smoking board made out of MS sheet metal with two coats of Non corrosive enameled paint. (P-55 I-13)				
30	Supplying, fixing, wiring, earth electrode for grounding conduits, IC cutouts and other equipments on the meter board using 40mm dia. 2.90mm thick GI pipe 2.5mtr. long buried in a pit. The Pit should be filled with equal proportion of salt and charcoal 150mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 120mm dia. bolt, nuts, washers and checknuts etc., the pipe shall have 16 through of 122mm dia. (P-57 I-7(a) BWSSB SR P-377 I-7)	No	1	1650.00	1650.00
32	Supplying and LTUG cable having aluminium conductor PVC insulated sheathed, galvanized steel wire/steel tape armoured cable with PVC outsheating 1.1KV class (conforming to IS 1554) 4 core 16sqmm PVC cable. BWSSB SR P-379 I-10.11)	Mtr	40	159.50	6380.00
33	Labour charges for laying 1.1kV class UG cable when supplied departmentally/agency in existing trench GI pipe/stoneware pipe/on wall/on pole as required. (P-59 I-10(a) 6sqmm to 16sqmm. BWSSB SR P-379 I-11.1(a))	Mtr	40	5.50	220.00
34	Digging of trench of 0.6m deep x 0.50mtr. wide refilling the trench to the required ground level and consolidating etc., complete. (P-59 I-11, (b,d, e) In soil (hard) BWSSB SR P-379 I-12(b))	Mtr	35	55.00	1925.00
35	Supplying & fixing of class A GI pipe on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1KV class. 40mm upto 16sqmm. (P-59 I-13(a) BWSSB SR P-380 I-15(A))	No	10	242.00	2420.00
36	Supplying & fixing LT Iron pot heads suitable for 1.1KV class UG Cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts and nuts and washers etc., 15sqmm 2/4 cores. BWSSB SR P-380 I-16(b))	No	1	264.00	264.00
37	Supplying & fixing guy set for items 1a) and b) (wherever span exceeds 10mm) formed out of not less than 4mm (8SWG) GI Wire with eye bolt or 10mm) formed out of not less than 12mmdia with cement concerning work including one break insulator as per approved drawing. If a suitable wall or RCC roof is not available for anchoring guy sets the anchoring has to be done by fixing GI wire to the rafter of the title or absetors BWSSB SR P-376 I-2)	No	1	175.00	175.00
38	KSRB 2-2.2: Earthwork excavation for foundation of buildings, water supply, sanitary pipe liens and electrical conduits either in pits in trenches upto 600mm in width (note 1 to KSRB 2.2 page 10) in	Cum	10.80	213.06	2301.00

SL NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
	hard soil not exceeding 1.5m depth including the bottom and sides of pits and trenches stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications. KBS 2.1 (b) 2.3.5 (P-7 I-2.4)1x20.00x0.60x0.90				
39	Refilling available earth around pipe lines, cables in layers not exceeding 20cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.50m. including cost of all labour complete as per specification (P-8 I.2.11) 1x20.00x0.60x0.90 -10.80	Cum	10.80	57.24	618.00
40	Providing and fixing in trenches galvanized / mild steel tubes (medium grade) 50mm dia nominal bore with all fittings including cost of all materials, labour charges, HOM of equipment and testing complete as per specification No. KBS 13.2.14/13.6 (P-94 I-13.15)	Rmt	4	299.98	1200.00
41	Providing and installation at site work P.V.C. pipes including cost of pipes and specials and labour including lowering into trenches, laying true to line level and perfect linking of joints, leak proof including jointing of approved type with all labour and lift charges with an initial lead of 5kms. Including encasing the pipe alround to a depth not less than 15cms. with gravel or selected earth available from the excavation etc., complete. 63mm (6KSC) (RDED SR Chap I(P-104 I-13.87.7) 63mm (a) kSC)	Mtr	20	1325.00	26500.00
42	Providing & fixing gun metal wheel valve conforming to IS specification of approved make as per direction including all lead and lift etc., complete. 50mm dia (KPWD SR 2006-07 Addl. Item No.65 I-65.6)(P- 97, I NO13.38)	No	1	1972.66	1973
43	KSRRB M200-12.2: Dismantling of existing structures like culverts, bridges retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work including T & P and scaffolding wherever necessary sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres complete as per specification i) Lime/Cement concrete I.By Manual means : A. Lime/Cement Concrete, I.By Manual means : B cement concrete Grade M-15 & M-20 (Page No.144, Item No. 18.18)	Cum	9.71	288.32	2800.00
44	KSRB 2 - 2.2 : Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications.Specification	Cum	29.16	213.06	6213.00

SL NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
	No.KBS 2.1(b) / 2.3.5 (Page No.5, Item No. 2.4) 2x27mtsx0.90x0.60=29.16)				
45	Providing and fixing PVC of 63mm dia 6kg/cm2 (PHE SR Page No. 104 & 105 Item No. 13.87.7.)	Rmt	10	1325.00	13250.00
46	KSRB 2.6 : Providing and filling sand in foundation upto plinth to required depth for sub soil treatment including watering ramming with lead upto 50m. and lift upto 1.5m complete as per specifications.Specification No.KBS 2.10.2(Page No.6, Item No. 2.13)	Cum	7.08	1279.42	9058.00
47	KSRB 2.3 : Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications Specification No.KBS 2.1 (Page No.6, Item No. 2.10)	Cum	14.57	95.40	1390.00
48	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778 having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings this includes jointing of pipes and fittings with one step solvent cement, trenching, refilling & testing of joints complete (external work) 20mm nominal OD pipes (Page No. 104,Item No. 13.87.2)	Rmt	62.40	116.60	7276.00
49	KSRB13-1.1 : Providing and fixing to wall, ceiling and floor galvanised / mild steel tube20mm dia nominal bore with fittings (medium grade weight 1.65 kg/ mtr)B class including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.14 / 13.8 (Page No. 104,Item No. 13.2)	Rmt	31.20	167.48	5225.00
50	KSRB 13.6.3-7 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 65mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBS 13.2.6 / 13.3 (Page No. 97 Item No. 13.38)	No	3	1972.66	5918.00
51	KSRB 13.6.2-2 : Providing and fixing in position brass stop cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.Specification No.KBS 13.2.2 / 13.3 (Page No. 96 Item No. 13.27)	No	26	135.68	3528.00
52	Gi pipe fittings ELBOW 20MM (Page No.XXXVII)	No	52	17.80	926.00
53	Gi pipe fittings SOCKET 20MM (Page No.XXXVII)	No	26	17.80	463.00
54	Lead for Disposal of Debries shell be payabel at		9.71	94.82	920.00

SL. NO.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
	Carriage rates by Mechanical means incLuding loading and unloading. From 10.00 to 15.00Km Conveying				
55	Electrical Deposit	Ls			19000.00
56	Miscellaneous				302.00
				Total Rs.	5,00,000.00

Executive Engineer,
Hebbal Division,
Bruhat Bangalore Mahanagara Palike

CERTIFICATES

1) This work comes under B.B.M.P. Limits.
2) This work has been inspected and found to be necessary.
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on the CSR of 2011-2012 and Data approved rates.

Assistant Engineer
Ward -18

Assistant Executive Engineer
Hebbal Sub Division
BBMP

Executive Engineer
Hebbal Sub Division
BBMP

ADMINISTRATIVELY SANCTIONED FOR
Rs. Five lakh only
Under Water Supply to New areas P-1802
Registered as EE(H) vide No. 534
Suoject to Conditions in Enclosed
Memo No. AS/639/11-12 Dt. 21/3/12

JE / AE

Exe. Engineer (H)

TECHNICALLY SANCTIONED FOR
Rs. Five lakhs only
Water supply New areas
Under P-1802
Registered as EE(H)vide No 534
Subject to conditions in enclosed memo
No TS/534/11-12 Dt: 22/3/12

JE/AE

E.E(H.)